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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,048	02/25/2004	Akira Date	ASAM.0114	8575

7590 10/31/2007  
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EXAMINER
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NGUYEN, DUSTIN

ART UNIT	PAPER NUMBER
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2154

MAIL DATE	DELIVERY MODE
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10/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/785,048	DATE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dustin Nguyen	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

1. Claims 1-10 are presented for examination.

### *Claim Objections*

2. Claims 1-10 are objected to because of the following informalities:
  - I. As per claim 1, "said server" should be corrected as "said data delivery server"
  - II. As per claims 1, 2, 4, "said maximum value" should be corrected as "said maximum value of size of one IP packet"
  - III. As per claims 5, 6, 9 and 10, "said maximum value" should be corrected as "said maximum value of data quantity".

Appropriate correction is required.

### *Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 5 directs to software per se, failing to fall within a statutory category of invention. It is not a machine, and it is clearly not a process, manufacture nor composition of matter [ Please see MPEP 2106 ].

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 5 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by

Thorsteinson et al. [ US Patent Application No 2003/012694 ].

6. As per claim 1, Thorsteinson disclose the invention as claimed including a data delivery server connected to a terminal by way of a network for delivering an IP packet having data packet recorded internally of payload [ i.e. transmitting digital video signals over an IP network ] [ Figure 1; Abstract; and paragraph 0092 ], comprising:

a search module for determining a maximum value of size of one IP packet capable of passing through a channel on said network extending from said server to said terminal [ i.e. automatically detecting the maximum packet size using well known protocol called Path MTU Discovery ] [ paragraphs 0205 and 0247 ],

a packet generating module for determining the number of said data packets to be stored in the payload of the IP packet on the basis of said maximum value to thereby implement the determined number of said data packets internally of the payload of said IP packet [ i.e.

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encapsulate the maximum number of MP2TS packets per Ethernet network packet ] [ Figure 5; and paragraphs 0204 and 0248 ], and

an input/output unit for delivering said IP packet generated by said packet generating module [ i.e. transmitter node for transmitting the IP network packets addressed to the receiver node over the IP network ] [ Figures 1 and 2; and paragraphs 0094, 0097 and 0222-0235 ].

7. As per claim 5, it is rejected for similar reasons as stated above in claim 1. Furthermore, Thorsteinson discloses a CPU and an input/output unit [ Figures 2 and 4; and paragraphs 0222-0235 ].

8. As per claim 8, it is rejected for similar reasons as stated above in claim 1. Furthermore, Thorsteinson discloses a packet generating module for structuralizing said determined number of data packets internally of the payload of said IP packet [ Figure 5; and paragraph 0204 ]; and wherein said terminal comprises an input/output unit for receiving the data delivered from said server [ i.e. receiving node provides buffering for input and output streams ] [ paragraphs 0128 and 0129 ].

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2-4, 6, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thorsteinson et al. [ US Patent Application No 2003/0126294 ], in view of Applicant's Admitted Prior Art [ Hereinafter as APA ].

11. As per claim 2, Thorsteinson does not specifically disclose terminal being a mobile terminal, further comprising a move detecting module designed for accepting a move message of said mobile terminal, wherein said search module determines said maximum value when move of said mobile terminal is detected by said move detecting module. APA discloses terminal being a mobile terminal, further comprising a move detecting module designed for accepting a move message of said mobile terminal, wherein said search module determines said maximum value when move of said mobile terminal is detected by said move detecting module [ i.e. mobilization of terminal ] [ page 3, lines 27-page 4, lines 17 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Thorsteinson and APA because the teaching of APA would enable mobilization of the terminal by making use of wireless LAN [ APA, page 4, lines 1-4 ].

12. As per claim 3, APA discloses mobile terminal corresponding to MobileIP, wherein said move detecting module is so designed as to accept a message of the move of said mobile terminal sent from a home agent of said mobile terminal defined by said MobileIP [ page 4, lines 2-17 ].

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13. As per claim 4, APA discloses wherein said search module determines said maximum value by transmitting a plurality of packets of different data quantities toward said terminal [ i.e. repeat ping for searching MTU ] [ page 2, lines 11-27 ].

14. As per claims 6 and 7, they are rejected for similar reasons as stated above in claims 2 and 3.

15. As per claim 9, it is rejected for similar reasons as stated above in claim 4.

16. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thorsteinson et al. [ US Patent Application No 2003/0126294 ], in view of Biederman [ US Patent No 7,006,526 ].

17. As per claim 10, it is rejected for similar reasons as stated above in claim 1. Furthermore, Thorsteinson discloses wherein said server includes a terminal cooperation module in place of said search module [ paragraph 0205 ]. Thorsteinson does not specifically disclose terminal further comprises a search module for determining a maximum value of data quantity capable of being transferred by one IP packet by way of a path on said network extending from said terminal to said server. Biederman discloses terminal further comprises a search module for determining a maximum value of data quantity capable of being transferred by one IP packet by way of a path on said network extending from said terminal to said server [ i.e. the client may

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obtain its MSS through an MTU discover or initiates a connection by sending a "SYN" packet advertising its outgoing interface MTU ] [ Figure 3; and col 7, lines 45-col 8, lines 10 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Thorsteinson and Biederman because the teaching of Biederman would provide a method and apparatus for avoiding problems of fragmentation of packets, dropping of packets, and retransmission of packets, which would reduce the incidence of transmission delays, bandwidth degradation, and additional processing in the packet's transmission path due to such problems [ Biederman, col 2, lines 29-37 ].

18. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dustin Nguyen

Examiner

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A handwritten signature in black ink, appearing to read 'Dustin', with a long, sweeping horizontal stroke extending to the right.